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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,489	10/27/2003	Yoshitomo Tokumoto	K06-163166M/TBS	3135
21254	7590	12/01/2004		
MCGINN & GIBB, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817			EXAMINER MILLER, TAKISHA S	
			ART UNIT	PAPER NUMBER
			2855	

DATE MAILED: 12/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/693,489

Applicant(s)

TOKUMOTO, YOSHITOMO

Examiner

Takisha Miller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

**DETAILED Final ACTION**

***Response to Arguments***

1. Applicant's arguments filed 09/14/04 have been fully considered but they are not persuasive.
  - a. On page 13 of the September 14<sup>th</sup> 2004 response, applicant argues the Nakamura et al. does not disclose the semiconductor MR elements being formed over and integrally with a common cell of a semiconductor wafer. Applicant argues that Nakamura et al. (Fig. 3) only shows MR element 21. Examiner cited an incorrect figure in the claim rejection. Fig. 25 clearly shows MR elements 121-128 being formed over and integral with a semiconductor wafer. Therefore, applicants' arguments are not persuasive.
  - b. On pages 13-14 of the September 14<sup>th</sup> 2004 response, applicant argues the Nakamura et al. does not disclose the newly claimed limitation that the targets include corrugations. This argument is not persuasive because, per Webster Collegiate Dictionary, Tenth Edition, corrugations is simply defined as alternating grooves or ridges on a surface. Nakamura et al. teaches targets comprising corrugations (Figs.12, 15, 21, 27). Therefore, applicants' arguments are not persuasive.

***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakamura et al. (2002/0020229)(hereinafter Nakamura).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

- a. With respect to claims 1,5,7,8,11-13 and 16-19, Nakamura teaches a rotation angle detecting device (71A) comprising a target (72) including a magnetic member (73) comprising corrugations (Figs. 12,15,21 and 27) connected integrally rotatably with a rotary member (102/103) and a plurality of magnetic sensors (Fig.17) arranged to face the magnetic member (73) for outputting signals according to a rotation of the rotary member (102/103)(¶ 0084, lines 1-13)(Fig.17), wherein the magnetic sensors (Fig.17) respectively include semiconductor MR elements (121-124), and at least some of the semiconductor MR elements are formed over and integrally with a common cell of a semiconductor wafer (23)(Figs. 26,26).
- b. With respect to claims 2,9 and 14, Nakamura teaches a rotation angle detecting device (71A) wherein the semiconductor MR elements (121-124) are arranged over the common cell and at circumferential positions different from each other with respect to the rotary member (102/103)(Fig.25).
- c. With respect to claims 3,10 and 15, Nakamura teaches a rotation angle detecting device (71A) wherein the semiconductor MR elements (121-124) are fixed integrally to a substrate (23) through an adhesive layer (¶ 0056, lines 6-8).

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d. With respect to claim 4, Nakamura teaches a torque detecting device (101) comprising a rotation member including a first rotary shaft (102) and a second rotary shaft (103) connected coaxially to the first rotary shaft (102); rotation angle detection devices (71A, 71B) provided to the first (102) and second (103) rotary shafts, respectively, each of the rotation angle detecting devices (71A, 71B) including, a target (72) including a magnetic member (73) connected integrally rotatably with the corresponding first (102) or second (103) rotary shaft, and a plurality of magnetic sensors (Fig.17) arranged to confront the magnetic member (73) for outputting signal according to a rotation of the corresponding first (102) or second (103) rotation shaft (¶ 0084, lines 1-13); wherein the magnetic sensors (Fig.17) respectively include semiconductor MR elements (121-124), and at least some of the semiconductor MR elements (121-124) are formed over and integrally with a common cell of a semiconductor wafer (23)(Figs. 25,26) and a torque detecting unit for detecting a torque to be applied to the rotary member based on signals outputted from the corresponding rotation angle detecting devices (71A,71B)( ¶ 0093, lines 5-9; ¶ 0094, lines 9-16).

### *Conclusion*

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after


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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Takisha Miller whose telephone number is (571) 272-2184. The examiner can normally be reached on Monday - Friday (7:00 am - 3:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on (571) 272-2180. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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